

## Prof. TÜLAY YAZIR

### Personal Information

**Office Phone:** [+90 462 377 2570](tel:+904623772570)

**Email:** tkesemen@ktu.edu.tr

**Web:** <https://avesis.ktu.edu.tr/tkesemen>

**Address:** KTÜ, Fen Fakültesi, Matematik Bölümü

### International Researcher IDs

ScholarID: hwDolUcAAAAJ

ORCID: 0000-0002-8807-5677

ScopusID: 15759447500

Yoksis Researcher ID: 123375

### Education Information

Doctorate, Karadeniz Technical University, Fen Fakültesi, Matematik Bölümü, Turkey 2001 - 2006

Postgraduate, Karadeniz Technical University, Fen Fakültesi, Matematik Bölümü, Turkey 1998 - 2001

Undergraduate, Karadeniz Technical University, Fatih Eğitim Fakültesi, Matematik Öğretmenliği, Turkey 1994 - 1998

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Other, Fen Bilimlerinde Araştırma Projesi Hazırlama Eğitimi, KTÜ, SEM, 2014

### Dissertations

Doctorate, Rasgele Hacimli Genişletilmiş (s,S) Tipli Modellerin Analitik ve Asimptotik Yöntemlerle İncelenmesi, (Investigation of Extended Models of Type (s,S) with Random Volume by Analytic and Asymptotic Methods), Karadeniz Technical University, Fen Bilimleri Enstitüsü, Matematik, 2006

Postgraduate, Genişletilmiş (s,S) Tipli Modellerin Analitik ve Asimptotik Yöntemlerle İncelenmesi, (Investigated the Extended Models of Type (s,S) by Analytic and Asymptotic Methods), Karadeniz Technical University, Fen Bilimleri Enstitüsü, Matematik, 2001

### Research Areas

Mathematics, Statistics, Probability Theory, Stochastic Processes, Natural Sciences

### Academic Titles / Tasks

Professor, Karadeniz Technical University, Fen Fakültesi, Matematik, 2019 - Continues

Professor, TOBB University of Economics and Technology, Mühendislik Fakültesi, Endüstri Mühendisliği, 2022 - 2023

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Matematik, 2014 - 2019

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Matematik, 2008 - 2014

Lecturer PhD, Karadeniz Technical University, Fen Fakültesi, Matematik, 2006 - 2008

Research Assistant, Karadeniz Technical University, Fen Fakültesi, Matematik, 2002 - 2006

## Academic and Administrative Experience

Fakülte Kurulu Üyesi, Karadeniz Technical University, Fen Fakültesi, Matematik, 2013 - 2016

## Advising Theses

Kesemen T., Bir Bariyerli Rasgele Yürüyüş Sürecinin Durağan Karakteristikleri için Moment Temelli Yaklaşık Formüller, Doctorate, B.Alakoç(Student), Continues

Yazır T., (s,S) Tipli yarı- Markov Envanter Modellerde Moment Bazlı Yaklaşımlar , Doctorate, F. BAGHEZZA(Student), 2024

Kesemen T., RASTGELE KISMİ DİFERANSİYEL DENKLEMLER ve RASTGELE KESİRLİ MERTEBEDEN KISMİ DİFERANSİYEL DENKLEMLERİN ANALİZİ, Doctorate, H.Anacı(Student), 2020

KESEMEN T., Talep Miktarlarının Ağır Kuyruklu Gamma-g Sınıfindan Dağılıma Sahip (s,S) Tipli Envanter Modellerin Yaklaşık Yöntemlerle İncelenmesi, Postgraduate, B.Alakoç(Student), 2020

KESEMEN T., Biyokimyasal Reaksiyon Modelinin Rastgele Özelliklerinin Farklı Olasılık Dağılımları ile İncelenmesi, Postgraduate, G.Karaaslan(Student), 2019

KESEMEN T., Bazı Kompartmanlı Modellerin Rasgele Etkiler Altında İncelenmesi, Doctorate, Z.BEKİRYAZICI(Student), 2017

KESEMEN T., Talep Miktarı Sonlu Varyanslı Ağır Kuyruklu Dağılıma Sahip (s,S) Tipli Envanter Modellerin Asimptotik Ve Yaklaşık Yöntemlerle İncelenmesi, Postgraduate, E.Şenol(Student), 2017

KESEMEN T., (s,S) Tipli Envanter Modellerin Ağır Kuyruklu Dağılımların Belirli Alt Sınıfları ile İncelenmesi, Doctorate, A.BEKTAŞ(Student), 2017

KESEMEN T., Dang Humması Hastalığının Rasgele Etkiler Altında Matematiksel Modellemesi, Postgraduate, M. (Mehmet)(Student), 2016

KESEMEN T., Genelleştirilmiş Beta Müdahaleli (s,S) Tipli Rasgele Yürüyüş Süreci, Postgraduate, Ç.ÖCAL(Student), 2013

KESEMEN T., Geçikmeli ve Pareto Müdahaleli Ödüllü Yenileme Süreçlerinin Sınır Fonksiyonlarının İncelenmesi, Postgraduate, Ş.DEMİR(Student), 2013

KESEMEN T., Pareto Müdahaleli yarı-Markov Süreçlerinin Asimptotik Yöntemlerle incelenmesi, Postgraduate, F.YETİM(Student), 2013

KESEMEN T., Belirsizlik Altında Sürekli Dağılımlar, Postgraduate, S.TURHAN(Student), 2010

## Published journal articles indexed by SCI, SSCI, and AHCI

### I. Moment-based approximation for variance of semi-Markovian random walk with gamma distributed interference of chance

ALAKOÇ B., KAMIŞLIK A. B., YAZIR T., YAZIR T., KHANIYEV T., KHANIYEV T.

Turkish Journal of Mathematics, vol.48, no.6, pp.1037-1054, 2024 (SCI-Expanded)

### II. Moment-based approximations for stochastic control model of type (s, S)

Kamişlık A. B., Baghezze F., KESEMEN T., Khaniyev T.

Communications in Statistics - Theory and Methods, vol.53, no.21, pp.7505-7516, 2024 (SCI-Expanded)

### III. A modification of approximate random characteristics for a model of Zika virus transmission

- Bekiryazıcı Z., Kesemen T., Merdan M., Hanalioğlu T.  
 THERMAL SCIENCE, vol.26, no.4A, pp.3067-3077, 2022 (SCI-Expanded)
- IV. Modification of the random differential transformation method and its applications to compartmental models**  
 Bekiryazici Z., Merdan M., Kesemen T.  
 COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.50, no.18, pp.4271-4292, 2021 (SCI-Expanded)
- V. A semi-Markovian renewal reward process with Gamma(g) distributed demand**  
 Kamislik A. B., Alakoc B., KESEMEN T., Khaniyev T.  
 TURKISH JOURNAL OF MATHEMATICS, vol.44, no.4, pp.1250-1262, 2020 (SCI-Expanded)
- VI. Inventory model of type (s, S) under heavy tailed demand with infinite variance**  
 Kamislik A. B., KESEMEN T., Khaniyev T.  
 BRAZILIAN JOURNAL OF PROBABILITY AND STATISTICS, vol.33, no.1, pp.39-56, 2019 (SCI-Expanded)
- VII. Deterministic stability and random behavior of a Hepatitis C model**  
 MERDAN M., Bekiryazici Z., KESEMEN T., Khanlyev T.  
 PLOS ONE, vol.12, no.7, 2017 (SCI-Expanded)
- VIII. Deterministic stability and random behavior of a Hepatitis C model**  
 Merdan M., Bekiryazıcı Z., KESEMEN T., Khaniyev T.  
 PLOS ONE, vol.12, no.7, pp.1-17, 2017 (SCI-Expanded)
- IX. Comparison of stochastic and random models for bacterial resistance**  
 MERDAN M., Bekiryazici Z., KESEMEN T., Khaniyev T.  
 ADVANCES IN DIFFERENCE EQUATIONS, 2017 (SCI-Expanded)
- X. Three-term asymptotic expansion: A semi-Markovian random walk with a generalized beta distributed interference of chance**  
 Kesemen T., KÜÇÜK Z., Khaniyev T., Öcal C.  
 COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.46, no.3, pp.1445-1455, 2017 (SCI-Expanded)
- XI. SOME ASYMPTOTIC RESULTS FOR A SEMI-MARKOVIAN RANDOM WALK WITH A SPECIAL BARRIER**  
 Aliyev R., KESEMEN T., Khaniyev T.  
 PAKISTAN JOURNAL OF STATISTICS, vol.30, no.3, pp.411-428, 2014 (SCI-Expanded)
- XII. ON THE SEMI-MARKOVIAN RANDOM WALK WITH DELAY AND WEIBULL DISTRIBUTED INTERFERENCE OF CHANCE**  
 Kesemen T.  
 HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.42, no.3, pp.299-307, 2013 (SCI-Expanded)
- XIII. Limit distribution for a semi-Markovian random walk with Weibull distributed interference of chance**  
 KESEMEN T., Aliyev R., Khaniyev T.  
 JOURNAL OF INEQUALITIES AND APPLICATIONS, 2013 (SCI-Expanded)
- XIV. Asymptotic Expansions for the Moments of the Semi-Markovian Random Walk with Gamma Distributed Interference of Chance**  
 Aliyev R., Khaniyev T., KESEMEN T.  
 COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.39, no.1, pp.130-143, 2010 (SCI-Expanded)
- XV. Asymptotic expansions for the moments of a semi-Markovian random walk with exponential distributed interference of chance**  
 Khaniyev T., KESEMEN T., Aliyev R., KOKANGÜL A.  
 STATISTICS & PROBABILITY LETTERS, vol.78, no.6, pp.785-793, 2008 (SCI-Expanded)
- XVI. The asymptotic results for the stationary characteristics of the semi-Markovian random walk with a barrier**  
 Khaniyev T., KESEMEN T., KESEMEN O., Aliyev R.  
 AUTOMATIC CONTROL AND COMPUTER SCIENCES, vol.1, pp.31-43, 2006 (SCI-Expanded)
- XVII. Certain asymptotic result for extended model of (s,S)**  
 Khaniyev T., ÜNVER İ., KESEMEN T.  
 Theory of Stochastic Processes, vol.1, pp.192-200, 2002 (SSCI)

## **Articles Published in Other Journals**

- I. **Investigation the ergodic distribution of a semi-Markovian inventory model of type (s,S) with intuitive approximation approach**  
Bektaş Kamişlık A., Alakoç B., Kesemen T., Khaniyev T.  
Journal of the Turkish Operations Management (JTOM), vol.7, no.1, pp.1483-1492, 2023 (Peer-Reviewed Journal)
- II. **MODELING DISEASE TRANSMISSION DYNAMICS WITH RANDOM DATA AND HEAVY TAILED RANDOM EFFECTS: THE ZIKA CASE**  
BEKİRYAZICI Z., KESEMEN T., MERDAN M., KHANIYEV T.  
Turkish World Mathematical Society Journal of Applied and Engineering Mathematics, vol.13, no.4, pp.1272-1286, 2023 (ESCI)
- III. **Homotopy Perturbation Elzaki Transform Method for Obtaining the Approximate Solutions of the Random Partial Differential Equations**  
Anac H., Merdan M., KESEMEN T.  
Gazi University Journal of Science, vol.35, no.3, pp.1051-1060, 2022 (ESCI)
- IV. **Transmission of Cholera Disease with Laplacian and Triangular Parameters**  
Merdan M., BEKİRYAZICI Z., KESEMEN T., KHANIYEV T.  
Iranian Journal of Mathematical Sciences and Informatics, vol.17, no.2, pp.289-305, 2022 (ESCI)
- V. **Analysis of The Dynamics of The Classical Epidemic Model with Beta Distributed Random Components**  
Kesemen T., Merdan M., Bekiryazıcı Z.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, no.2020, pp.1956-1965, 2020 (Peer-Reviewed Journal)
- VI. **Solving for the random component time-fractional partial differential equations with the new Sumudu transform iterative method**  
Kesemen T., Merdan M., Anaç H.  
SN Applied Sciences, vol.1, no.1, pp.1-10, 2020 (ESCI)
- VII. **APPLICATION OF CRANK-NICOLSON METHOD TO A RANDOM COMPONENT HEAT EQUATION**  
Anac H., MERDAN M., KESEMEN T.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ, vol.38, no.1, pp.475-480, 2020 (ESCI)
- VIII. **THE NEW SUMUDU TRANSFORM ITERATIVE METHOD FOR STUDYING THE RANDOM COMPONENT TIME-FRACTIONAL KLEIN-GORDON EQUATION**  
MERDAN M., ANAÇ H., KESEMEN T.  
Sigma J Eng & Nat Sci, vol.10, pp.343-354, 2019 (Peer-Reviewed Journal)
- IX. **Investigation of Random and Stochastic Models for CD8 T Cell Immune Response**  
Merdan M., Bekiryazıcı Z., KESEMEN T., Anaç H.  
Journal of Abstract and Computational Mathematics, vol.-, no.4, pp.37-48, 2019 (Peer-Reviewed Journal)
- X. **Solving of Some Random Partial Differential Equations by Using Differential Transformation Method and Laplace- Padé Method**  
Merdan M., Anaç H., Bekiryazıcı Z., KESEMEN T.  
GÜMÜŞHANE ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, vol.9, pp.108-118, 2019 (Peer-Reviewed Journal)
- XI. **THE NEW SUMUDU TRANSFORM ITERATIVE METHOD FOR STUDYING THE RANDOM COMPONENT TIME-FRACTIONAL KLEIN-GORDON EQUATION**  
MERDAN M., Anac H., KESEMEN T.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ, vol.10, no.3, pp.343-354, 2019 (ESCI)
- XII. **Analyzing the Dynamics of Ebola Transmission with Random Effects**  
Merdan M., Bekiryazıcı Z., KESEMEN T., Khaniyev T.  
Communications in Mathematical Biology and Neuroscience, vol.2018, pp.1-17, 2018 (Scopus)
- XIII. **Üçgensel Müdahaleli Yarı-Markov (s,S) Tipli Modellerin Momentleri İçin Tahmin Ediciler**

- Eriş Büyükkaya M., Bektaş Kamişlık A., Kesemen T.  
 Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.8, no.2, pp.430-441, 2018 (Peer-Reviewed Journal)
- XIV. **On The Moments for Ergodic Distribution of an Inventory Model of Type (s; S) with Regularly Varying Demand Having Infinite Variance**  
 Bektaş Kamişlık A., KESEmen T., Khaniyev T.  
 Journal of Applied and Engineering Mathematics, vol.8, pp.318-329, 2018 (Peer-Reviewed Journal)
- XV. **ANALYZING THE DYNAMICS OF EBOLA TRANSMISSION WITH RANDOM EFFECTS**  
 MERDAN M., Bekiryazici Z., KESEmen T., Khaniyev T.  
 COMMUNICATIONS IN MATHEMATICAL BIOLOGY AND NEUROSCIENCE, 2018 (ESCI)
- XVI. **ON THE MOMENTS FOR ERGODIC DISTRIBUTION OF AN INVENTORY MODEL OF TYPE (s, S) WITH REGULARLY VARYING DEMANDS HAVING INFINITE VARIANCE**  
 Kamislik A. B., Kesemen T., Khaniyev T.  
 TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.8, pp.318-329, 2018 (ESCI)
- XVII. **Stochastic and random models of Malaria Disease with vertical transmission**  
 Bekiryazıcı Z., KESEmen T., Merdan M.  
 New Trends in Mathematical Sciences, vol.5, no.1, pp.269-277, 2017 (Peer-Reviewed Journal)
- XVIII. **Inventory Model of Type (s,S) With Subexponential Weibull Distributed Demand**  
 KESEmen T., Bektaş Kamişlık A., KÜÇÜK Z., Şenol E.  
 Journal Of The Turkish Statistical Association, vol.--, no.9, pp.81-92, 2016 (Peer-Reviewed Journal)
- XIX. **Mathematical Modeling of Biochemical Reactions Under Random Effects**  
 Bekiryazıcı Z., Merdan M., KESEmen T., Khaniyev T.  
 Turkish Journal of Mathematics and Computer Science, vol.5, pp.8-18, 2016 (Peer-Reviewed Journal)
- XX. **Mathematical Modeling of Dengue Disease under Random Effects**  
 Bekiryazıcı Z., Merdan M., KESEmen T., Najmuldeen M.  
 MATHEMATICAL SCIENCES AND APPLICATIONS E-NOTES, no.4, pp.0-70, 2016 (Peer-Reviewed Journal)
- XXI. **On The Application Of Random Walk With Delay And Pareto Distributed Interference Of Chance To An Insurance Model**  
 KESEmen T., KÜÇÜK Z., Khaniyev T., YETİM F., Bektas Kamislik A.  
 GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, no.3, pp.615-626, 2016 (ESCI)
- XXII. **Asymptotic results for boundary functionals of renewal-reward process with delay and pareto distribution intreference of chance**  
 KÜÇÜK Z., KESEmen T., Demir Ş., Bektaş Kamişlık A.  
 Journal of Selçuk University Natural and Applied Science, vol.3, no.3, pp.1-12, 2014 (Peer-Reviewed Journal)
- XXIII. **Aysmptotic results for boundary functionals of renewal-reward process with delay and pareto distribution interference of chance**  
 KESEmen T., Küçük Z., Demir Ş., Kamişlık Bektaş A.  
 Journal of Selçuk University Natural and Applied Science, vol.3, no.3, pp.1-10, 2014 (Peer-Reviewed Journal)
- XXIV. **Pareto Distribution and Numerical Characteristics of This Distribution Under Uncertainty**  
 ERBAY DALKILIÇ T., KESEmen T., TANK F.  
 Journal Of The Turkish Statistical Association, vol.6,, pp.66-72, 2013 (Peer-Reviewed Journal)
- XXV. **Numerical Characteristics Of Pareto Distribution Under Uncertainty**  
 ERBAY DALKILIÇ T., Kesemen T., Tank F.  
 Journal Of The Turkish Statistical Association, vol.6, no.2, pp.66-72, 2013 (Peer-Reviewed Journal)
- XXVI. **Pareto Müdahaleli yarı-Markov Süreçleri için Asimptotik Sonuçlar**  
 KESEmen T., Aliyev R., ÜNVER İ.  
 7. İstatistik Günleri Sempozyumu Bildiriler Kitabı, 28-30 Haziran, Ankara, vol.1, no.2, pp.95-100, 2010 (Peer-Reviewed Journal)
- XXVII. **Approximations for the stationary Characteristics of the extended model of (s,S) with Delay**  
 KHANIYEV T., Kesemen O., KESEmen T.  
 Proceeding of the 6th International Symposium on Intelligent and Manufacturing Systems., vol.1, no.2, pp.356-366, 2008 (Peer-Reviewed Journal)

- XXVIII. **5. İstatistik Kongresi, Bildiri Kitabı**  
 KESEMEN T., Aliyev R., KHANİYEV T.  
 Geçikmeli Yarı- Markov Rasgele Yürüyüş Süreçleri için Asimptotik Sonuçları, vol.3, no.2, pp.689-693, 2007 (Peer-Reviewed Journal)
- XXIX. **Erlang Müdahaleli ve Geçikmeli Yarı- Markov Rasgele Yürüyüş Süreçleri için Asimptotik Sonuçları**  
 KESEMEN T., KHANİYEV T.  
 XX. Ulusal Matematik Sempozyumu Bildiriler Kitabı, vol.1, no.1, pp.281-285, 2007 (Peer-Reviewed Journal)
- XXX. **Certain asymptotic results for the stationary characteristics of semimarkovian random walk with constraint**  
 KHANIEV T., KESEMEN T., KESEMEN O., ALIEV R.  
 Automatic Control and Computer Sciences, vol.40, no.1, pp.26-37, 2006 (Scopus)

## Books & Book Chapters

- I. **OLASILIK KURAMINDA ÇÖZÜMLÜ PROBLEMLER**  
 HANALIOĞLU T., ÜNVER İ., KÜÇÜK Z., KESEMEN T.  
 NOBEL YAYINEVİ, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. **A New Study on a Random Conformable Fractional System Modeling Acid-Mediated Tumor Cell Invasion**  
 Meral G., Yazır T., Bekiryazıcı Z., Anaç H.  
 Approximation Theory and Special Functions ATSF 2024 Conference- 8th Series, Ankara, Turkey, 4 - 07 September 2024, pp.174
- II. **Moment-Based Approximation for a Renewal Reward Process with Generalized Gamma Distributed Interference of Chance**  
 Bektaş Kamışlık A., Yazır T., Hanalioğlu T., Hanalioğlu Z.  
 Approximation Theory and Special Functions ATSF 2024 Conference- 8th, Ankara, Turkey, 4 - 07 September 2024, pp.36
- III. **Moment-Based Approximations for Stationary Characteristics of a Stochastic Control Model of Type (s,S) with Asymmetric Triangular Distributed Interference of Chance**  
 Khanjyev T., Bektaş Kamışlık A., Baghezze F., Yazır T.  
 V. International Applied Statistics Congress (UYIK-2024), İstanbul, Turkey, 21 - 23 May 2024
- IV. **Moment-Based Approximation Formula for Variance of Semi-Markovian Random Walk Process**  
 Alakoç B., Bektaş Kamışlık A., Kesemen T., Hanalioğlu T.  
 International Conference on Science, Engineering Management and InformationTechnology (SEMIT 2023), Ankara, Turkey, 14 - 15 September 2023, pp.156
- V. **Inventory Model of Type (s,S) with Heavy Tailed Demand and Heavy Tailed Interference of Chance**  
 Bektaş Kamışlık A., Hasançebi H. H., Kesemen T., Hanalioğlu T.  
 SEMIT 2023, Ankara, Turkey, 14 - 15 September 2023, pp.157
- VI. **Moment Based Approximation for a Semi-Markovian Inventory Model with Asymmetric Triangular Distributed Interference of Chance**  
 Feyrouz Baghezze F., Bektaş Kamışlık A., Kesemen T., Hanalioğlu T.  
 2nd Internatlonal E-Conference on Mathematical and Statistical Sciences: A Selçuk Meeting, Konya, Turkey, 5 - 07 June 2023, pp.124
- VII. **Gender Based Transmission Dynamics of Zika Virus with Random Effects**  
 Bekiryazıcı Z., Kesemen T., Merdan M., Hanalioğlu T.  
 International Online Conferences on Engineering and Natural Sciences, Gümüşhane, Turkey, 5 - 07 July 2021,

- pp.212
- VIII. **Moment Based Approximation for a Semi Markovian Inventory Model of Type (s,S)**  
Kesemen T., Bektaş Kamişlık A., Hanalioğlu T., Baghezza F.  
ASMDA 2021 Conference and Demographics Workshop Applied Stochastic Models and Data Analysis International Conference, Athens, Greece, 1 - 04 June 2021, pp.26
- IX. **INVESTIGATION OF RANDOM ZIKA VIRUS TRANSMISSION WITH MODIFIED RANDOM DIFFERENTIAL TRANSFORMATION METHOD**  
Bekiryazıcı Z., Kesemen T., Merdan M., Hanalioğlu T.  
9TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, 25 - 28 August 2020, pp.114-116
- X. **Intuitive Approximation for Renewal Reward Process with  $\Gamma(g)$  Distributed Demand**  
Alakoç B., Kesemen T., Bektaş Kamişlık A., Hanalioğlu T.  
3 rd INTERNATIONAL E-CONFERENCE ON MATHEMATICAL ADVANCES AND ITS APPLICATIONS, İstanbul, Turkey, 24 - 27 June 2020, pp.42
- XI. **Homotopy Perturbation Elzaki Transform Method to Random Component Partial Differential Equations**  
Anaç H., Merdan M., Kesemen T.  
3 rd INTERNATIONAL CONFERENCE on MATHEMATICAL ADVANCES and APPLICATIONS (ICOMAA2020), İstanbul, Turkey, 24 - 27 July 2020, pp.95
- XII. **Modelling Disease Transmission Scenarios Using Field Data and Heavy Tailed Random Effects: The Zika Case**  
BEKİRYAZICI Z., KESEmen T., MERDAN M., HANALİOĞLU T.  
11th International Statistics Congress, 4 - 08 October 2019
- XIII. **Random Finite Difference Method for Some Partial Differential Equations**  
MERDAN M., ANAÇ H., KESEmen T.  
International Conference on Computational Methods in Applied Sciences (IC2MAS19), 12 - 16 July 2019
- XIV. **Applications of Crank-Nicolson method to some random component partial differential equations**  
ANAÇ H., MERDAN M., KESEmen T.  
International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019, pp.181-182
- XV. **Projected differential transform method to some random component nonlinear partial differential equations with proportional delay**  
MERDAN M., ANAÇ H., KESEmen T.  
International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019, pp.187-188
- XVI. **Inventory Model of Type (s,S) with ?(?) Distributed Component**  
Bektaş Kamişlık A., Alakoç B., KESEmen T., Khaniyev T.  
2nd INTERNATIONAL CONFERENCE ON MATHEMATICAL AND RELATED SCIENCES ICMRS 2019, Antalya, Turkey, 27 - 30 April 2019, pp.45
- XVII. **Generalized Beta Distributed Parameters for a SVEIR-Type Random Model of Polio Transmission**  
Bekiryazıcı Z., KESEmen T., Merdan M.  
7 th International Eurasian Conference on Mathematical Sciences and Applications, Kiyev, Ukraine, 28 - 31 August 2018, pp.149
- XVIII. **On The Estimator of Semi-Markovian Inventory Model with Subexponential Component**  
ERİŞ BÜYÜKKAYA M., BEKTAŞ KAMIŞLIK A., KESEmen T., HANALİOĞLU T.  
INTERNATIONAL CONFERENCE on RECENT ADVANCES in PURE AND APPLIED MATHEMATICS (ICRAPAM2018), 23 - 27 July 2018, pp.56-57
- XIX. **Analysis of a Pneumonia Transmission Model with Random Components**  
Bekiryazıcı Z., KESEmen T., Merdan M.  
INTERNATIONAL CONFERENCE on RECENT ADVANCES in PURE AND APPLIED MATHEMATICS (ICRAPAM2018), Trabzon, Turkey, 23 - 27 July 2018, pp.39-40

- XX. **A New Estimator for Ergodic Distribution of a Semi-Markovian Renewal Reward Process when Demand Distributions Belongs to the L<sup>1</sup>D Subclass of Heavy Tailed Distributions**  
BEKTAŞ KAMIŞLIK A., ERİŞ BÜYÜKKAYA M., KESEMEN T.  
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.751-752
- XXI. **Applications of Differential Transform Method to Some Random Component Time-Fractional Partial Differential Equations**  
Merdan M., Anaç H., KESEMEN T.  
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.251-252
- XXII. **Fractional Variational Iteration Method for the Random Component Time-Fractional Fornberg-Whitham Equation**  
Merdan M., Anaç H., KESEMEN T.  
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.277-278
- XXIII. **Investigation of A Model For Polio By Using Random Differential Equations and Parameters with Gaussian Distribution**  
Bekiryazıcı Z., KESEMEN T., Merdan M.  
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.783-784
- XXIV. **A Comparison of Variation Coefficients of Biochemical Reaction Model for Several Probability Distributions**  
KESEMEN T., Bekiryazıcı Z., Khaniyev T., Karaaslan G.  
International Conference on Mathematics and Mathematics Education (ICMME-2018), Ordu, Turkey, 27 - 29 June 2018, pp.743-744
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 8th International Symposium of Statistics, Eskişehir, Turkey, 11 - 13 October 2012, pp.234
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 1st International Conference on Analysis and Applied Mathematics (ICAAM), Gümüşhane, Turkey, 18 - 21 October 2012, vol.1470, pp.255-258
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 6th International symposium on Intelligent and Manufacturing Systems, 14 - 16 October 2008
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## Supported Projects

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 YAZIR T., MERDAN M., BEKİRYAZICI Z., BEKTAŞ KAMIŞLIK A., ORAL P., Project Supported by Higher Education Institutions, Biyokimyasal Reaksiyon Modelinin Deterministik ve Stokastik Kararlılık Analizi, 2016 - 2019  
 KÜÇÜK Z., KESEMEN T., TUBITAK Project, Ağır Kuyruklu Dağılımların (s,S) Tipli Envanter Modellere Uygulanması, 2015 - 2017  
 YAZIR T., Project Supported by Higher Education Institutions, Özel Bariyerli Yarı Markov Rasgele Yürüyüş Süreçlerinin

## Activities in Scientific Journals

Fundamental Journal of Mathematics and Applications, Committee Member, 2020 - Continues

## Scientific Refereeing

Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, National Scientific Refreed Journal, June 2024

Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, Other journals, January 2024

GAZI UNIVERSITY JOURNAL OF SCIENCE, Other journals, January 2024

Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, Other Indexed Journal, November 2023

Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, April 2023

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, February 2022

GÜMÜŞHANE ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, National Scientific Refreed Journal, August 2021

Sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, June 2021

IOCENS21 International Online Conference on Engineering and Natural Sciences, Other Journals, April 2021

sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, October 2020

TURKISH JOURNAL OF MATHEMATICS, Journal Indexed in SCI-E, September 2020

Advances in Research, Other Indexed Journal, July 2020

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, Journal Indexed in ESCI, June 2020

Advances in Difference Equations, Journal Indexed in ESCI, June 2020

Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Other Journals, May 2020

sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, April 2020

Sains Malaysiana, SCI Journal, October 2019

Turkish Journal of Mathematics , SCI Journal, February 2019

Turkish Journal of Mathematics , SCI Journal, November 2018

Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Other journals, September 2018

Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Other journals, May 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, March 2018

Mathematical Sciences and Applications E-Notes, Other journals, October 2016

Mathematical Sciences and Applications E-Notes., Other Indexed Journal, August 2016

Mathematical Sciences and Applications E-Notes., Other Indexed Journal, January 2016

Mathematical Sciences and Applications E-Notes., Other Indexed Journal, February 2014

Journal of Computational and Applied Mathematics , SCI Journal, February 2013

Communications in Statistics-Theory and Methods , SCI Journal, January 2013

Neural Computing and Application , SCI Journal, February 2012

## Scientific Consultations

2. INTERNATIONAL TURKISH WORLD ENGINEERING AND SCIENCE CONGRESS, Scientific Consultancy, Karadeniz Technical University, Fen Fakültesi, Matematik, Turkey, 2019 - 2019

## **Metrics**

Publication: 102

Citation (WoS): 100

Citation (Scopus): 94

H-Index (WoS): 5

H-Index (Scopus): 5

## **Awards**

KESEmen T., Yurtdışı Araştırma, YÖK, June 2013

KESEmen T., Karadeniz Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2006 Yılı Lisansüstü Başarı Belgesi, Fen Bilimleri Enstitüsü, September 2006

KESEmen T., Karadeniz Teknik Üniversitesi, Fatih Eğitim Fakültesi, Matematik Öğretmenliği Bölümü,, Bölüm birinciliği, June 1998

## **Non Academic Experience**

MİLLİ EĞİTİM BAKANLIĞI